Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

Reserve
1.96
R31Fso

WATER SUPPLY OUTLOOK FOR OREGON

U.S. DEPT OF AGRICULTURE
NATIONAL AGRIC. LIBRARY
JUN 29 '76
CURRENT SERIAL RECORDS

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

OREGON DEPARTMENT OF WATER RESOURCES

AS OF
JAN. 1, 1976

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snawfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snawpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snaw water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key lacations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
SCS PHOTO AZ-5460

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperotion with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Raam 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Raom 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevoda	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokone, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Farests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG.1975

WATER SUPPLY OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

JANUARY 8, 1976

Issued by

R. N. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GUY W. NUTT

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
PORTLAND OREGON

In Cooperation with

OREGON
DEPARTMENT
OF
WATER RESOURCES

Report prepared by

TOMMY A. GEORGE, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
1220 S.W. THIRD AVENUE
PORTLAND, OREGON 97204

TABLE OF CONTENTS

PAGE

STREAMFLOW PROSPECTS FOR OREGON.....(MAP)..... FACING PAGE 1

WATER SUPPLY OUTLOOK FOR OREGON..... 1

DETAILED WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

AREA 1 OWYHEE, MALHEUR..... 3

AREA 2 BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA..... 5

AREA 3 UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY..... 7

AREA 4 UPPER JOHN DAY..... 9

AREA 5 UPPER DESCHUTES, CROOKED.....11

AREA 6 HOOD, MILE CREEKS, LOWER DESCHUTES.....13

AREA 7 LOWER COLUMBIA.....15

AREA 8 WILLAMETTE.....17

AREA 9 ROGUE, UMPQUA.....19

AREA 10 KLAMATH.....21

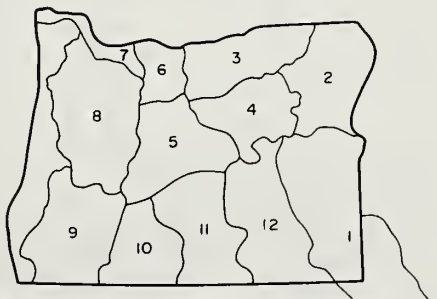
AREA 11 LAKE COUNTY, GOOSE LAKE.....23

AREA 12 HARNEY BASIN.....25

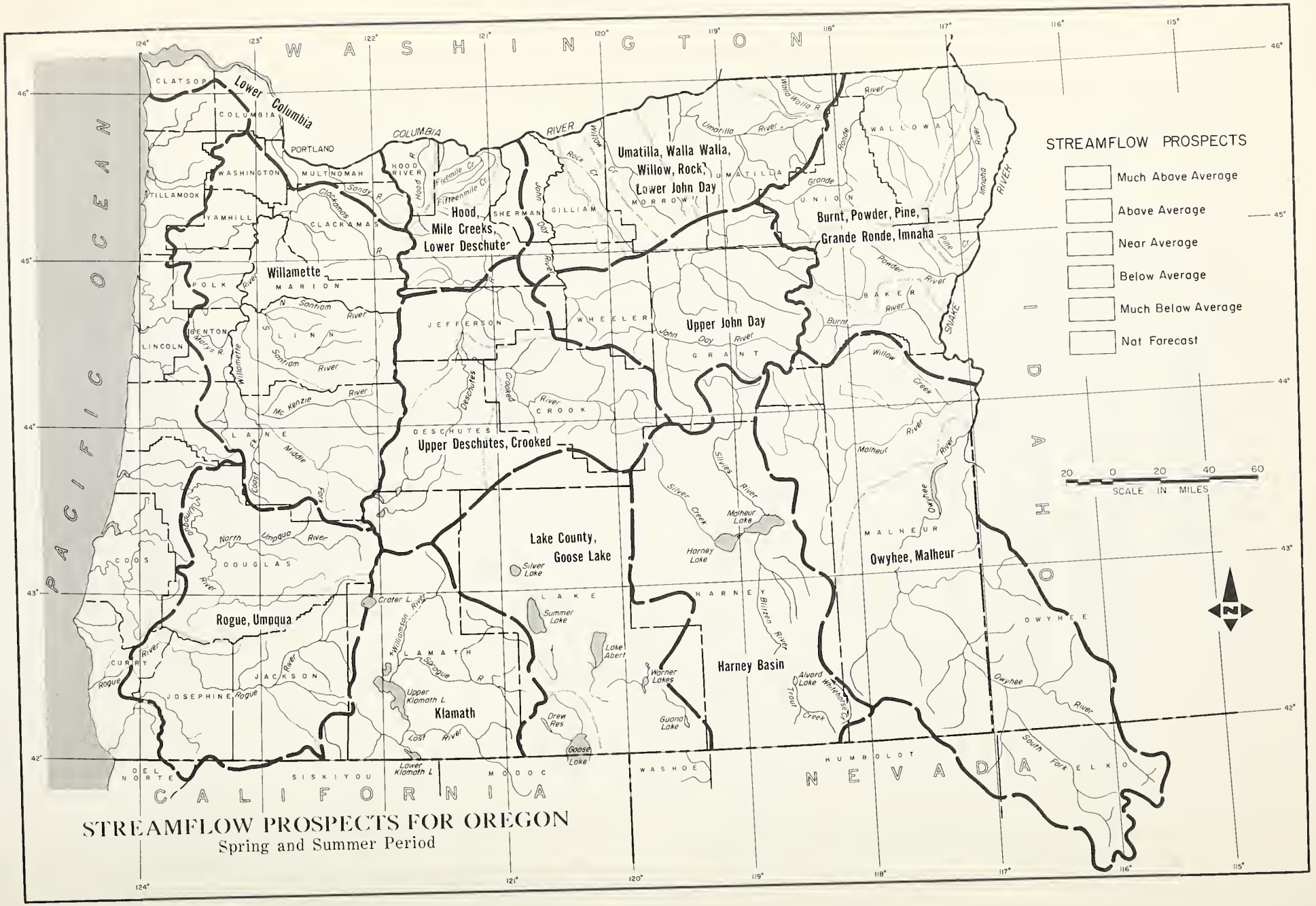
BASIC DATA SUPPLEMENTS
I SNOW
II SOIL MOISTURE
III PRECIPITATION

MAP AND INDEX OF OREGON SNOW COURSES.....(MAP)

LIST OF COOPERATORS.....INSIDE BACK COVER



WATERSHED AREA LOCATIONS



STREAMFLOW PROSPECTS FOR OREGON

Spring and Summer Period

WATER SUPPLY OUTLOOK for OREGON

JANUARY 1, 1976

Water supply conditions in Oregon next summer will range from near normal to below average. The mountain snowpack is near average to slightly below in most locations with several areas experiencing a poor snow cover. Reservoir storage is even better than last year's excellent conditions.

SNOW COVER

Early snow measurements indicate a snowpack ranging from 80% of normal up to average over most of the state. Poorest conditions exist in Lake County and the eastern part of Klamath County where snow cover is only 40% of normal. The highest snowpack measurements were on the Upper Rogue basin at 125% of normal. Most of the snow is at the high elevation snow courses. Low elevation snow is practically non-existent.

PRECIPITATION

Precipitation for the past two months, November-December has been average to much below. Driest conditions, 50 to 60% of normal have occurred in Lake, Klamath and Malheur counties and somewhat explain current snowpack conditions in these areas. Much precipitation at lower elevations has fallen as rain and has contributed to winter runoff. If this had come as snow it would have been available later in the year as runoff.

RESERVOIR STORAGE

Twenty-four major irrigation reservoirs in the state contain slightly over 2 million acre feet of water. This is 68% of total capacity and 137% of what can normally be expected for this time of year. This excellent storage is due to good winter runoff to date and the very good carryover from last year.

continued on next page -

continued--

STREAMFLOW

Streamflow for the water year to date has been generally much above normal. This has been due to snowmelt and rain instead of snow at lower elevations in the mountains. Representative streamflow for the October-December period is as follows:

STREAM	% of 1958-72 Average
Owyhee net Inflow	173
Chewaucan near Paisley	91
Grande Ronde near La Grande	189
Willamette Middle Fk. blw. N. Fk.	156
Umpqua near Elkton	124
Rogue at Raygold	114
Klamath Lake net Inflow	113

This report contains data furnished by the Oregon Department of Water Resources, U. S. Geological Survey, NOAA National Weather Service and other cooperators.

WATER SUPPLY OUTLOOK

OWYHEE, MALHEUR WATERSHEDS

OREGON

GENERAL OUTLOOK

THE GENERAL OUTLOOK FOR WATER SUPPLIES FOR MALHEUR COUNTY THIS COMING SEASON IS NEAR AVERAGE. THE MOUNTAIN SNOWPACK IS SLIGHTLY BELOW AVERAGE. PRECIPITATION HAS BEEN POOR, ABOUT HALF OF NORMAL FOR THE WINTER PERIOD NOVEMBER-DECEMBER. HOWEVER, RESERVOIR STORAGE IS VERY GOOD AND EVEN BETTER THAN LAST YEAR'S GOOD CONDITIONS. THERE MAY BE SOME SHORTAGES FOR THOSE USERS DEPENDENT ON DIRECT DIVERSIONS.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average c
Bully Creek at Warmsprings					
Malheur near Drewsey					
Malheur, North Fork at Beulah	Note: Forecasts begin on Feb. 1, 1976				
Owyhee Reservoir net Inflow					

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	Forecasts begin in the Feb. 1 report which will be issued about Feb. 8, 1976		

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average
Antelope	70.0		1.8	6.2 [b]
Beulah Reservoir	60.0	20.0	21.6	17.8
Bully Creek	30.0	14.2	10.9	10.4
Owyhee	715.0	594.2	410.1	363.2
Warmsprings	191.0	125.2	115.3	65.6

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average c
Jordan Creek	(Discontinued)		
Malheur River [e]			
Owyhee River [e]			

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average c
Jordan Creek	2	92	90
Malheur River	4	86	93
Owyhee River	4	79	89

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES SHOULD BE AVERAGE TO SLIGHTLY BELOW. THE SNOWPACK RANGES FROM 70% OF NORMAL ON THE POWDER TO AVERAGE ON THE BURNT RIVER. RESERVOIR STORAGE IS GOOD FOR THIS TIME OF YEAR.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Bear near Wallowa					
Burnt near Hereford					
Catherine near Union					
Eagle Creek abv. Skull Creek					
Grande Ronde at La Grande					
Hurricane near Joseph					
Imnaha at Imnaha					
Lostine near Lostine					
Powder near Sumpter					
Wallowa, East Fork near Joseph					

Note: Forecasts begin on Feb. 1, 1976

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Phillips Lake	73.5	[e]	51.2	--- [b]
Thief Valley	17.4	17.4	17.4	14.4
Unity	25.2	11.1	10.9	7.7
Wallowa Lake	37.5	26.4	24.4	19.9

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Burnt River	3	97	101
Grande Ronde River above La Grande	3	57	81
Powder River	2	97	70
Wallowa, Imnaha, Catherine Creek	--	--	--

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Burnt, Powder [e] Grande Ronde, Catherine Creek, Imnaha River [e]			

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

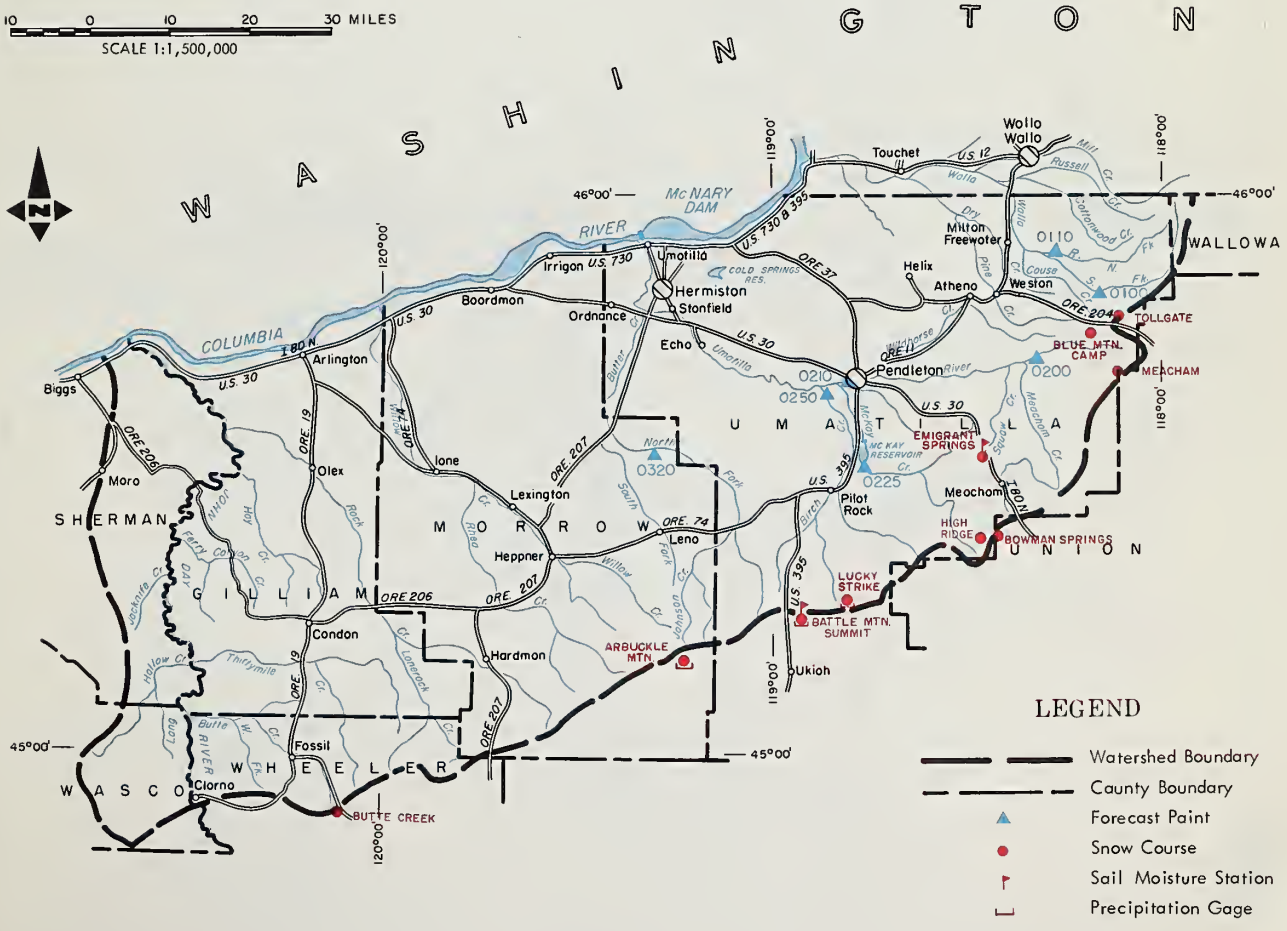
WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES SHOULD BE CLOSE TO AVERAGE. THE SNOWPACK IS A LITTLE ABOVE NORMAL ON THE WALLA WALLA AND SLIGHTLY BELOW ON THE UMATILLA. RESERVOIR STORAGE IS MUCH MORE THAN WHAT WOULD NORMALLY BE EXPECTED FOR JANUARY 1.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR: FORECAST: Thousand Acre Feet	THIS YEAR: FORECAST: Percent of Average	THIS YEAR: FORECAST PERIOD	PAST RECORD: THOUSAND ACRE FEET: Last Year	PAST RECORD: THOUSAND ACRE FEET: Average [c]
Birch Creek at Rieth					
Butter Creek near Pine City					
McKay near Pilot Rock					
Umatilla near Gibbon	Note: Forecasts begin on Feb. 1, 1976				
Umatilla at Pendleton					
Walla Walla, South Fork near Milton					

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	Forecasts begin in the Feb 1 report which will be issued about Feb. 8, 1976		

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average [c]
Cold Springs	50.0	23.4	14.5	21.6
McKay	73.8	31.3	15.0	18.3

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Umatilla, Walla Walla, McKay Creek [e]			

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average [c]
McKay Creek	2	55	63
Umatilla River	3	90	101
Walla Walla River	2	99	117

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

UPPER JOHN DAY WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES ON THE JOHN DAY DRAINAGES SHOULD BE BELOW AVERAGE. THE MOUNTAIN SNOWPACK IS SLIGHTLY BELOW AVERAGE AND WINTER PRECIPITATION TO DATE HAS BEEN 75% OF AVERAGE.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Camas Creek near Ukiah					
John Day, Middle Fork at Ritter					
John Day, North Fork at Monument					
Strawberry near Prairie City					

Note: Forecasts begin on Feb. 1, 1976

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average [c]
John Day above Dayville [e]		178	1 '
John Day, North Fork [e]		1 8	1 7

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	Average [c]
John Day, North Fork	3	89	88
John Day abv. Dayville	2	107	97

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

UPPER DESCHUTES, CROOKED WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES SHOULD BE CLOSE TO AVERAGE. THE MOUNTAIN SNOWPACK IS NEAR AVERAGE ALTHOUGH WINTER PRECIPITATION HAS BEEN 65% OF NORMAL. RESERVOIR STORAGE IS ABOVE AVERAGE AND CLOSE TO LAST YEAR'S EXCELLENT CONDITIONS.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Beaver Creek near Paulina					
Crane Prairie Reservoir total Inflow					
Crescent at Crescent Lake					
Crooked near Post					
Deschutes at Benham Falls					
Deschutes below Snow Creek					
Deschutes, Little near La Pine					
Ochoco Reservoir net Inflow					
Odell near Crescent					
Squaw near Sisters					
Tumalo near Bend					

Note: Forecasts begin on Feb. 1, 1976

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow			
Crooked R. near Post			
Deschutes at Bend			
Little Deschutes near La Pine			

Forecasts begin in the Feb. 1 report which will be issued about Feb. 8, 1976

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Crane Prairie	55.3	55.5	55.6	38.1
Crescent Lake	86.9	79.9	81.5	42.2
Ochoco	47.5	27.8	20.3	17.5
Prineville	153.0	93.1	93.1	98.5
Wickiup	200.0	179.5	193.1	121.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Crooked R., Upper [e]			
Deschutes River			

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Crooked, Ochoco	--	--	--
Deschutes abv. Wickiup	1	85	96
Little Deschutes	2	118	105
Tumalo & Squaw Crs.	2	79	91

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES SHOULD BE AVERAGE TO BELOW AVERAGE. THE MOUNTAIN SNOWPACK BELOW NORMAL AND WINTER PRECIPITATION TO DATE HAS BEEN NEAR NORMAL. WASCO RESERVOIR IS NEARLY FULL.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Hood River near Tucker Bridge					
Hood, West Fork near Dee	Note: Forecasts begin on Feb. 1, 1976				
White below Tygh Valley					

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	Forecasts begin in the Feb.1 report which will be issued about Feb. 8, 1976		

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Clear Lake (Wasco)	11.9	9.0	7.9	1.5

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Hood River	2	142	81
Mile Creeks	--	---	--
White River	2	142	81

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average.((d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

LOWER COLUMBIA WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES ALONG THE LOWER COLUMBIA WILL BE CLOSE TO AVERAGE. THE SNOW COVER ON THE COLUMBIA BASIN GENERALLY IS NEAR NORMAL. HEAVY AMOUNTS OF SNOW EXIST IN WYOMING ABOVE JACKSON LAKE, ON IDAHO'S BLACKFOOT RIVER AND ON THE UPPER CLARK'S FORK IN MONTANA, ALL ABOUT 1-1/2 TIMES NORMAL. LESS THAN AVERAGE AMOUNTS OF SNOW WERE MEASURED ON THE YAKIMA AND SPOKANE RIVERS IN WASHINGTON AND IDAHO. RESERVOIR STORAGE IS GOOD THROUGHOUT THE BASIN AND WINTER PRECIPITATION HAS GENERALLY BEEN GOOD.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average [c]
Sandy River	1	159	109

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average [c]
Columbia at The Dalles [d]					
Sandy River near Marmot	Note: Forecasts begin on Feb. 1, 1976				

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW [d] (1,000 A.F.)			REGULATED PEAK (1,000 c.f.s.)	DATE
	APR – SEPT.	APR – JUNE	MAY – JUNE		
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,408	65,112	622	June 10
1968	89,000	55,500	47,900	404	June 13
1969	112,300	85,700	63,800	515	May 15
1970	88,100	62,800	55,200	425	May 28
1971	122,900	88,400	73,700	557	May 13
1972	134,700	96,400	81,400	619	June 20
1958-72 Avg.	104,300	72,900	59,900	529	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE* (Weather Bu)	FLOW AT THE DALLES (1,000 c.f.s.)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Estimated (b) 1958-72 adjusted averagel (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK
WILLAMETTE WATERSHEDS
OREGON

GENERAL OUTLOOK

WATER SUPPLIES THIS NEXT SUMMER WILL PROBABLY BE BELOW AVERAGE. THE MOUNTAIN SNOWPACK IS NEAR NORMAL ALONG THE CASCADE CREST AND MUCH BELOW NORMAL AT MEDIAN AND LOW ELEVATIONS. WINTER PRECIPITATION HAS BEEN NEAR NORMAL BUT MUCH OF IT HAS FALLEN AS RAIN AND HAS ALREADY OCCURRED AS RUNOFF. STREAMFLOW FOR THE WATER YEAR TO DATE HAS BEEN MUCH ABOVE AVERAGE.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Clackamas at Estacada					
Clackamas above Three Lynx					
McKenzie at McKenzie Bridge					
McKenzie near Vida					
McKenzie, So. Fork near Rainbow					
Oak Grove Fork above Power Intake					
Row near Dorena					
Santiam, North at Mehama					
Santiam, South at Waterloo					
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge					
Willamette, No. Fk. of Mid. Fk. near Oakridge					
Willamette at Salem					

Note: Forecasts begin on Feb 1, 1976

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Clackamas River	2	181	74
McKenzie River	3	83	94
Row River	2	60	45
Santiam River	4	50	68
Willamette, Mid. Fk.	3	132	116

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Blue River	85.6*	0.1	0	----
Cottage Grove	30.0*	0.3	0	1.4 [b]
Cougar	155.2*	5.7	9.0	14.4 [b]
Detroit	299.9*	15.5	55.1	25.3
Dorena	70.5*	0.1	1.3	6.7
Fall Creek	115.0*	0	0	0 [b]
Fern Ridge	94.2*	0	1.0	10.4
Foster	30.0*	0.4	0	1.1 [b]
Green Peter	270.0*	26.9	37.6	6.6 [b]
Hills Creek	200.0*	8.3	9.5	15.9 [b]
Lookout Point	337.2*	8.7	8.6	34.4
Timothy Lake	61.7	61.0	48.8	49.1
Henry Hagg Lake	53.6	26.8	----	----

* Multiple purpose reservoir--space reserved primarily for flood runoff.

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

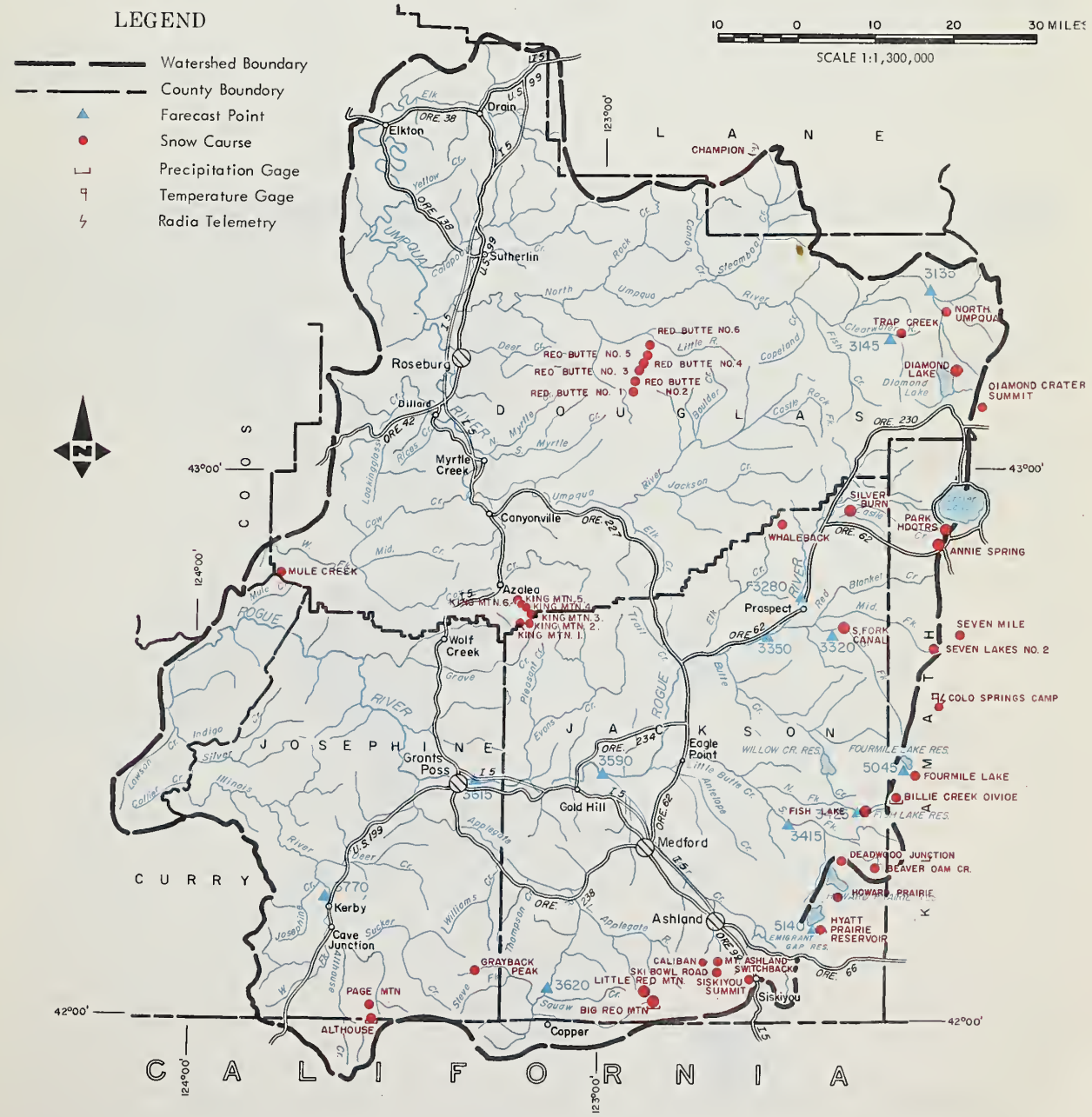
WATER SUPPLY OUTLOOK

ROGUE, UMPQUA, WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES IN THE ROGUE BASIN SHOULD BE GOOD. GENERALLY THE SNOWPACK IS ABOVE AVERAGE EXCEPT AT THE LOWER ELEVATIONS IN THE SISKIYOUS WHERE IT IS POOR. WINTER PRECIPITATION HAS BEEN NEAR NORMAL. RESERVOIR STORAGE IS BETTER THAN LAST YEAR'S EXCELLENT AMOUNTS. STREAMFLOW SINCE OCTOBER HAS ALSO BEEN GOOD.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Applegate near Copper					
Clearwater above Trap Creek					
Fourmile Lake net Inflow					
Hyatt Reservoir net Inflow					
Illinois River near Kerby					
Little Butte, N. Fk. at Fish Lake nr. Lake Cr.					
Little Butte, S. Fk. near Lake Creek					
Rogue above Prospect					
Rogue, South Fork near Prospect[d]					
Rogue at Raygold near Central Point					
Rogue at Grants Pass					
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls					

Note: Forecasts begin on Feb. 1, 1976

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Little Butte Creek, South Fork	Forecasts begin in the Feb.1 report which will be issued about Feb. 8, 1976		
Rogue at Raygold			

*Average daily cfs forecast to flow on this date.

[d]

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Emigrant Lake	39.0	18.6	14.7	18.0*
Fish Lake	8.0	6.9	7.5	5.0
Fourmile Lake	16.1	14.4	10.0	7.7
Howard Prairie	60.0	49.5	41.2	35.3 [b]
Hyatt Prairie	16.1	12.0	10.3	9.8

*Average for years of record (in base period) after reconstruction.

SUMMARY of SNOW MEASUREMENTS

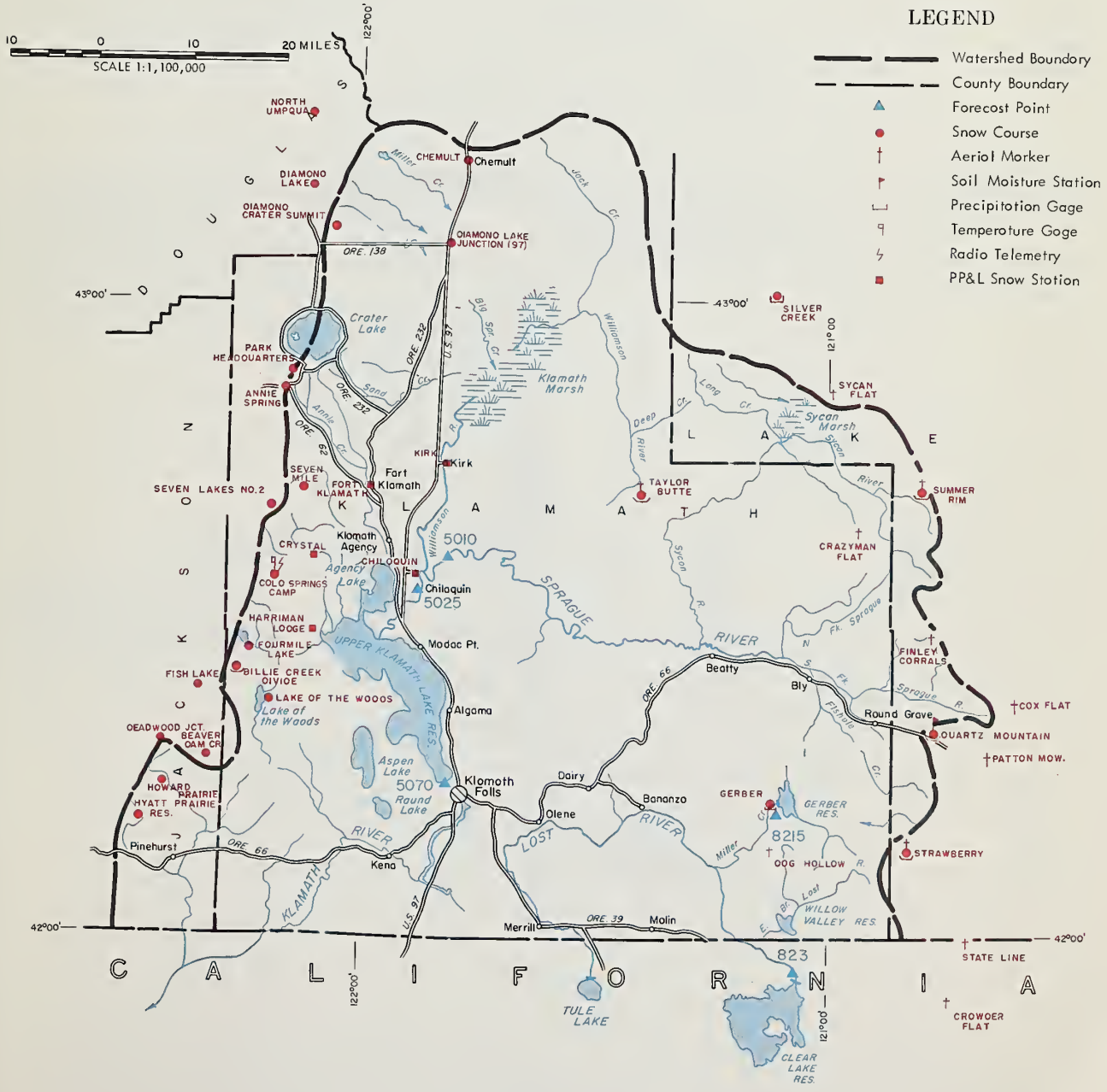
(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Applegate	--	--	--
Bear Creek	1	0	0
Butte Creek	3	115	112
Illinois River	--	--	--
North Umpqua	3	93	105
Rogue River	3	119	126

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON
GENERAL OUTLOOK

WATER SUPPLIES SHOULD BE NORMAL ON STREAMS HEADING IN THE CASCADES. STREAMS IN EASTERN KLAMATH COUNTY WILL PROBABLY SUPPLY BELOW AVERAGE AMOUNTS OF WATER. THE SNOWPACK IN THE CASCADES IS GOOD AND IS POOR ON THE SPRAGUE RIVER. RESERVOIR STORAGE IS VERY GOOD HOWEVER, WHEN COMPARED TO NORMAL FOR JANUARY 1. PRECIPITATION FOR THE WINTER PERIOD HAS ONLY BEEN 60% OF NORMAL.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR: FORECAST: Thousand Acre Feet	THIS YEAR: FORECAST: Percent of Average	THIS YEAR: FORECAST PERIOD	PAST RECORD: THOUSAND ACRE FEET: Last Year	PAST RECORD: THOUSAND ACRE FEET: Average [c]
Clear Lake Reservoir Inflow					
Gerber Reservoir Inflow					
Sprague near Chiloquin					
Upper Klamath Lake net Inflow					
Williamson below Sprague River					

Note: Forecasts begin on Feb. 1, 1976

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Upper Klamath[e]			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average [c]
Clear Lake	440.2	285.6	274.1	188.4
Gerber	94.0	53.3	43.8	37.9
Upper Klamath Lake	584.0	324.2	324.2	341.3

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average [c]
Lost River	1	0	0
Sprague River	2	32	27
Upper Klamath	5	85	84
Williamson River	3	102	86

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

LAKE COUNTY, GOOSE LAKE WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLY PROSPECTS LOOK POOR, ESPECIALLY FOR USERS DEPENDENT ON DIRECT DIVERSION FROM STREAMS. RESERVOIR STORAGE IN DREWS IS GOOD BUT THE MOUNTAIN SNOWPACK IS ONLY 40% OF AVERAGE. WINTER PRECIPITATION HAS BEEN ABOUT 60% OF NORMAL.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Chewaucan near Paisley					
Deep above Adel					
Drews Reservoir net Inflow					
Honey Creek near Plush					
Silver Creek near Silver Lake					
Twentymile near Adel					

Note: Forecasts begin on Feb. 1, 1976

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average [c]
Chewaucan, Silver Creek,[e] Drew Creek			
Honey, Deep, 20-Mi. Cr.[e]			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Cottonwood	8.7	1.4	---	2.1*[b]
Drews	63.0	35.3	29.1	29.8

*Average for years of record (in base period) after reconstruction.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

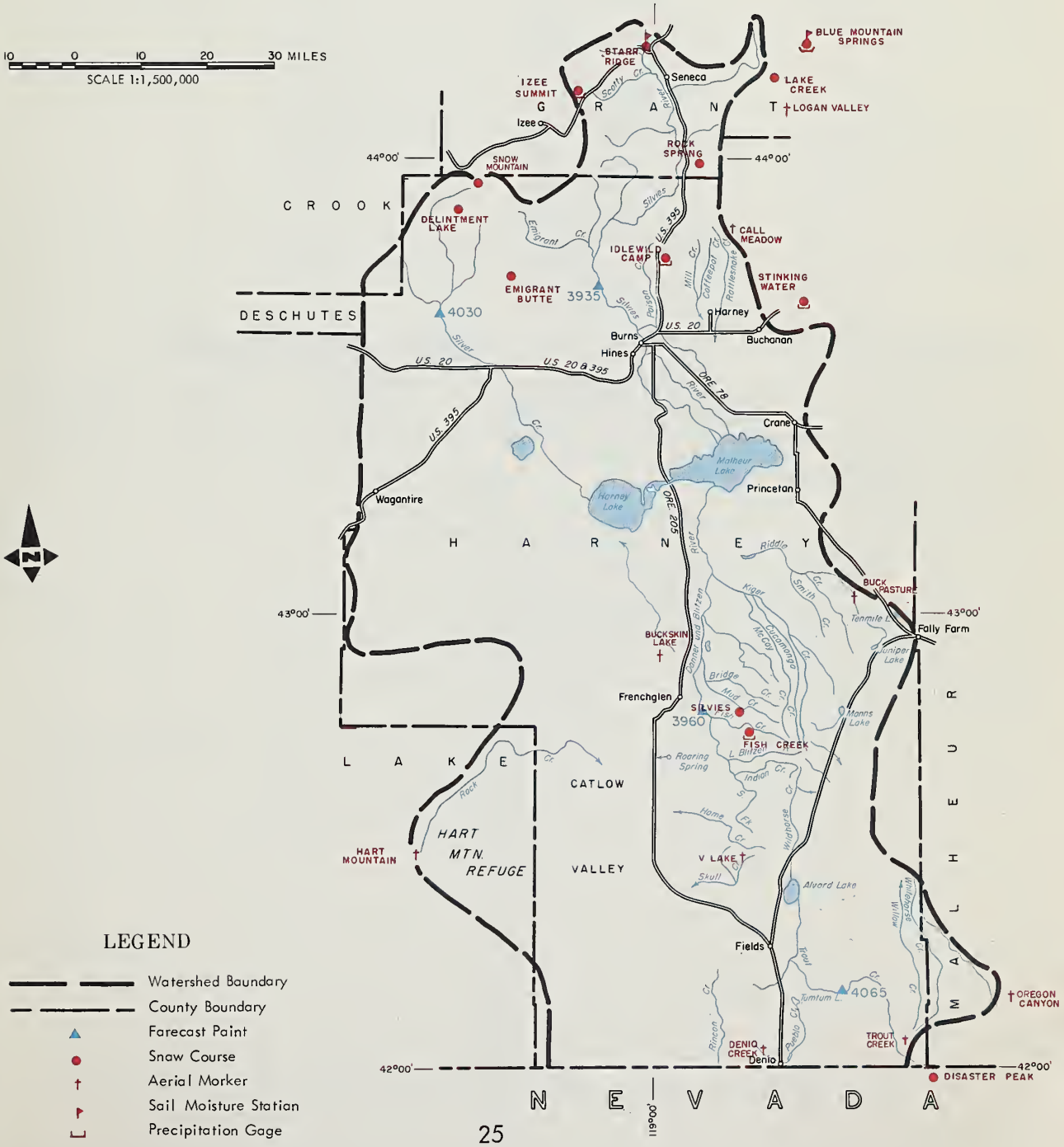
RIVER BASIN and/or SUB-WATERSHED	Number of Courses Avcraged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	Average [c]
Chewaucan River	2	32	27
Deep Creek	1	86	59
Drew Creek	1	26	31
Honey Creek	1	86	59
Silver Creek	2	53	24
Twentymile Creek	--	--	--

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK
HARNEY BASIN WATERSHEDS
OREGON

GENERAL OUTLOOK

WATER SUPPLIES SHOULD BE NEAR NORMAL. THIS IS BASED ON VERY FEW SNOW MEASUREMENTS, HOWEVER. THESE FEW MEASUREMENTS INDICATE A PACK THAT IS 98% OF AVERAGE. WINTER PRECIPITATION HAS BEEN 80% OF NORMAL.



LEGEND

- Watershed Baundary
- County Boundary
- Farecast Paint
- Snaw Course
- Aerial Morker
- Sail Moisture Statian
- Precipitation Gage

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Donner und Blitzen near Frenchglen					
Silver near Riley					
Silvies River near Burns					
Trout Creek near Denio					

Note: Forecasts begin on Feb. 1, 1976

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Silvies River, Silver Cr. Trout Cr., Donner und Blitzen River [e]			

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Donner und Blitzen R.	1	79	107
Silver Creek	--	--	--
Silvies River	2	98	97
Trout Creek	--	--	--

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average (d) Corrected to natural flow. (e) Not scheduled.

BASIC DATA SUPPLEMENT 1

JANUARY 1, 1976

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[c]
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)	e				---
Battle Creek (Ida.)	e				
Bear Creek (Nev.)	e			10.4	7.8[b]
Big Bend (Nev.)[a]	12/26	--	3.0[a]	e	3.0[b]
Blue Mountain Springs	1/2	25	6.0	4.6	6.1
Blue Mountain Spgs. Pillow*	1/2	--	8.3	3.8	---
Buck Pasture	e				
Buckskin, Lower (Nev.)	e				
Buckskin, Upper (Nev.)	e				
Bull Basin (Ida.)	e				
Bully Creek	e				
Call Meadow	e				
Columbia Basin (Nev.)	12/26	12	3.0	e	
Cottonwood-Indian	e				
Disaster Peak (Nev.)	e				
Eldorado Pass	1/2	8	1.2	3.0	1.7
Fawn Creek (Nev.)	12/26	12	3.0	e	
Fish Creek	e				
Fish Creek***	e				
Flag Prairie	e				
Fox Creek (Nev.)	e				
Fry Canyon (Nev.)	12/29	11	2.7	4.2	3.0
Gold Creek (Nev.)[a]	12/26	--	1.8	2.0	1.9
Granite Peak (Nev.)	e				
Hyde Pasture (Ida.)	e				
Jack Creek, Lower (Nev.)	e				
Jack Creek, Upper (Nev.)	12/26	12	3.0	e	
Jack Peak (Nev.)	e				
Lake Creek R.S.	1/2	17	3.4	4.2	3.8[b]
Laurel Draw (Nev.)	e				
Logan Valley	e				
Lookout Butte	e				
Louse Canyon	e				
Martin Creek (Nev.)	e				
Merritt Mountain (Nev.)	e				
Midas (Nev.)	e				
Mud Flat (Ida.)	e				
Oregon Canyon	e				
Quinn Ridge (Nev.)	e				
Red Canyon (Ida.)	e				
Rock Spring	1/2	9	1.8	2.6	1.8
Rodeo Flat (Nev.)[a]	12/26	--	2.4[a]	4.0	2.6[b]
76 Creek (Nev.)	e			5.9	---[b]
Silver City (Ida.)	12/24	16	4.6	6.2	5.6[b]
Silvies	e				
Silvies***	e				
South Mountain #2 (Ida.)	12/30	16	4.8	4.0	3.9[b]
Stag Mountain (Nev.)	e				
Stinking Water	12/31	5	1.5	1.9	1.4[b]
Succor Creek (Ida.)	e				
Taylor Canyon (Nev.)	12/29	4	1.0	2.6	1.8[b]
Toe Jam (Nev.)	e				
Tremewan Ranch (Nev.)	e			0.4	0.8
Triangle (Ida.)	e				
Trout Creek	e				
"V" Lake	e				
Vaught Ranch (Ida.)	e				
War Eagle (Ida.)	e				

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[c]
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Aneroid Lake #1	e				
Aneroid Lake #2	e				
Anthony Lake	12/29	39	1.8	10.0	11.0
Bald Mountain (Ore.)	e				
Beaver Reservoir	12/27	22	4.6	11.3	5.4[b]
Big Sheep	e				
Blue Mtn. Summit	12/27	15	2.7	3.5	3.3
Bourne	e				
County Line	12/30	7	1.6	3.2	2.2
Dooley Mountain	12/30	11	2.1	3.4	3.8
Eilertson Meadows	12/27	12	3.2	2.7	4.7
Eldorado Pass	1/2	8	1.2	3.0	1.7
Gold Center	e				
Goodrich Lake	e				
Little Alps	12/29	14	3.9	4.6	5.5[b]
Little Antone	12/29	8	1.5	2.3	4.1
Little Antone Alt.	12/29	12	2.6	---	---
Lucky Strike	e				
Meacham	12/30	11	3.2	4.3	3.3
Mirror Lake	e				
Moss Spring	e				
Schneider Meadow	e				
Schoolmarm	e			3.0	1.9
Standley	12/30	6	1.2	e	
Taylor Green	e				
Tipton	12/27	24	5.0	6.0	4.2
Tipton Snow Pillow*	12/31	28	6.2	6.0	---
Tollgate	12/31	41	10.2	9.9	8.9
TV Ridge	e				
West Eagle Meadows	e				
UMATILLA, WALLA WALLA, WILLOW, ROCK LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	e				
Arbuckle Mtn. Pillow*	e				
Blue Mountain Camp	12/31	23	6.4	7.0	5.5[b]
Bowman Springs	12/30	11	2.7		
Butte Creek Summit	e			2.1	---
Emigrant Springs	12/30	2	0.4	2.2	2.4
High Ridge Pillow*	1/2	48	15.6	e	---
Lucky Strike	e				
Meacham	12/30	11	3.2	4.3	3.3
Tollgate	12/31	41	10.2	9.9	8.9

BASIC DATA SUPPLEMENT 1

JANUARY 1, 1976

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (In.)	THIS YEAR: Water Cont. (In.)	PAST REC.: Water Content (inches): Last Yr.	PAST REC.: Water Content (inches): Ave.[c]
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	12/29	39	11.8	10.0	11.0
Arbuckle Mountain	e				
Arbuckle Mountain Pillow*	e				
Blue Mountain Springs	1/2	25	6.0	4.6	6.1
Blue Mountain Spgs. Pillow*	1/2	--	8.3	3.8	---
Blue Mountain Summit	12/27	15	2,7	3.5	3.3
Butte Creek Summit	e			2.1	----
Derr	e				
Gold Center	e				
Indian Creek Butte	e				
Izee Summit	1/2	14	2.8	3.6	3.0
Lucky Strike	e				
Marks Creek	e			2.0	1.9
Ochoco Meadows	e				
Olive Lake	e				
Schoolmarm	12/30	6	1.2	3.0	1.9
Snow Mountain	e				
Snow Mountain Pillow**	12/29	--	1.9	3.0	
Starr Ridge	e			3.6	2.2
Tipton	12/27	24	5.0	6.0	4.2
Tipton Snow Pillow*	12/31	28	6.2	6.0	----
UPPER DESCHUTES, CROOKED WATERSHEDS					
Bald Peter	12/30	40	14.8	14.2	----
Caldwell Ranch	e				
Cascade Summit	12/31	45	13.1	10.8	10.7
Chemult	12/30	11	2.3	2.3	4.0
Chemult Alternate	12/30	13	2.8	3.2	----
Derr	e				
Hogg Pass	12/29	32	12.4	14.9	14.5
Hungry Flat	e			1.9	3.5
Irish-Taylor Pillow**	e			19.5	----
Lionshead	12/12	8	2.4	e	----
Marks Creek	e			2.0	1.9
New Crescent Lake	e				
New Dutchman Flat #2	12/26	59	21.5	25.2	22.3
Ochoco Meadows	e				
Racing Creek	12/30	20	3.6	5.8	----
Snow Mountain	e				
Snow Mountain Pillow**	12/29	--	1.9	e	
Summit Lake	e				
Summit Lake Pillow**	12/19	--	11.9	e	----
Tamarack	e				
Tangent	12/26	20	6.4	10.0	8.4[b]
Three Creek Butte	e				
Three Creek Meadow	e				
Three Creek Mdw. Pillow**	e				----
Waldo Lake	e				
Whitewater Meadow	12/12	6	1.8	e	----

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (In.)	THIS YEAR: Water Cont. (In.)	PAST REC.: Water Content (inches): Last Yr.	PAST REC.: Water Content (inches): Ave.[c]
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadows	e				
Clear Lake	12/29	1	0.5	1.0	3.4
Clear Lake (Experimental)	12/29	13	5.7	4.2	5.4[b]
Greenpoint	e				
Greenpoint Pillow	e			---	---
Knebal Springs	e				
Mt. Hood Test Site	12/31	--	24.3	e	22.9
Mud Ridge	12/29	29	11.5	---	---
Red Hill	e				
Red Hill Pillow	e			---	---
Still Creek	12/29	21	8.6	5.4	7.9
Switchback	e				
Tilly Jane	e				
Ulrich Ranch Junction	e				
Umbrella Falls					
WILLAMETTE WATERSHEDS					
Cascade Summit	12/31	45	13.1	10.8	10.7
Champion	12/29	15	6.7	9.6	11.2[b]
Clackamas Lake	e				
Clear Lake	12/29	1	0.5	1.0	3.4
Clear Lake (Expt.)	12/29	13	5.7	4.2	5.4[b]
Dead Horse Grade	12/27	11	4.2	4.5	6.4
Detroit (Town)	12/29	0	0.0	0.3	1.0
Detroit Dam	12/29	0	0.0	T	0.5
Golden Curry Creek	12/29	0	0.0	0.5	2.3
Hogg Pass	12/29	32	12.4	14.9	14.5
Lake Harriet	e			---	1.1
Laurel Mountain	12/31	6	1.0	0.2	---
Layng Creek	12/29	0	0.0	T	0.1
Lookout Point Dam	12/31	0	0.0	0.0	0.0[b]
Lost Creek Ranch	12/27	0	0.0	1.4	2.0
Lund Park	12/29	0	0.0	0.1	T[b]
Marion Forks	12/29	T	0.0	1.6	4.7[b]
Marys Peak	e				
McCredie Springs[a]	12/31	3	0.2	T	0.5[b]
McKenzie	12/27	48	21.4	24.2	17.8
McKenzie Bridge	12/27	0	0.0	0.0	0.6
Mill City	12/29	0	0.0	0.0	0.2
Mt. Hood Test Site**	12/31	--	24.3	e	22.9
Mud Ridge	12/29	29	11.5	---	---
Oakridge	12/31	0	0.0	0.0	0.0[b]
Peavine Ridge Pillow**	12/31	--	6.2	2.7	5.7[b]
Railroad Overpass[a]	12/31	6	0.5	1.2	0.8[b]
Saddle Mountain Pillow**	12/31	--	2,9	1.2	---
Salt Creek Falls	12/31	24	5.8	2.7	5.2
Santiam Junction	12/29	19	8.0	9.2	8.6[b]
Santiam Junction Pillow**	e			---	---
Seine Creek Pillow**	12/31	--	0.3	0.3	---
Still Creek	12/29	21	8.6	5.4	7.9
Summit Lake	e			e	
Summit Lake Pillow**	12/19	--	11.9	e	---
Timothy Lake	e			2.8	6.3
Valsetz Summit	12/31	4	0.2	T	---
Vida	12/27	0	0.0	0.0	0.2
Waldo Lake	e				
Weaver Creek	12/29	0	0.0	0.2	0.4
White Branch Slide	12/27	0	0.0	2.0	3.1
Whitewater Bridge	12/29	0	0.0	1.0	2.3[b]

BASIC DATA SUPPLEMENT 1

JANUARY 1, 1976

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (In.)	THIS YEAR: Water Cont. (In.)	PAST REC.: Water Content (inches): Last Yr.	PAST REC.: Water Content (inches): Ave [c]
ROGUE, UMPQUA WATERSHEDS					
Althouse	e				
Annie Spring	12/31	59	10.1	18.8	16.3
Beaver Dam Creek	12/31	24	8.1	4.6	6.6
Big Red Mountain	e				
Billie Creek Divide	12/29	29	9.8	9.6	8.7[b]
Caliban	e				
Caliban (Alternate)	e				
Champion	12/29	15	6.7	9.6	11.2[b]
Cold Springs Camp Pillow**	e			---	---
Deadwood Junction	12/31	17	5.3	2.4	4.0[b]
Diamond-Crater Summit	12/29	41	13.2	13.4	11.3[b]
Diamond Lake	12/29	26	9.2	8.5	7.6
Fish Lake	12/29	21	7.3	5.6	5.6[b]
Fourmile Lake	e				---
Grayback Peak	e				
Howard Prairie Reservoir	12/31	12	3.5	2.4	3.9[b]
Hyatt Prairie	12/31	12	3.6	2.3	3.7
King Mountain #1	12/29	0	0.0	3.9	8.3
King Mountain #2	12/29	0	0.0	3.9	6.5
King Mountain #3	12/31	0	0.0	1.8	3.4
King Mountain #4	12/31	0	0.0	0.7	0.2
King Mountain #5	12/31	0	0.0	0.7	0.0
King Mountain #6	12/31	0	0.0	0.0	0.0
Little Red Mountain	e				
Mt. Ashland Switchback	e				
Mule Creek	12/29	0	0.0	1.1	---
North Umpqua	12/30	22	5.1	7.2	6.0
Page Mountain	e				
Park Headquarters	12/31	84	25.5	29.6	23.3
Red Butte #1	12/28	0	0.0	2.8	6.5
Red Butte #2	12/28	0	0.0	1.6	4.0
Red Butte #3	12/28	0	0.0	1.[illegible]	2.[illegible]
Red Butte #4	12/28	0	0.0	0.7	1.[illegible]
Red Butte #5	12/28	0	0.0	0.3	2.[illegible]
Red Butte #6	12/28	0	0.0	0.2	0.[illegible]
Seven Mile	e				
Silver Burn	12/31	24	8.5	5.1	5.6
Siskiyou Summit	12/30	T	0.0	2.4	3.7[b]
Ski Bowl Road	e				
South Fork Canal	12/29	T	0.0	2.4	2.1
Trap Creek	12/30	18	5.5	5.5	5.2[b]

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (In.)	THIS YEAR: Water Cont. (In.)	PAST REC.: Water Content (inches): Last Yr.	PAST REC.: Water Content (inches): Ave
KLAMATH WATERSHEDS					
Annie Spring	12/31	59	10.1	18.8	16.3
Billie Creek Divide	12/29	29	9.8	9.6	8.7[b]
Chemult	12/30	11	2.3	2.3	4.0
Chemult (Alternate)	12/30	13	2.8	3.2	---
Chiloquin (PP&L)	e				0.6
Cold Spgs. Camp Pillow**	e				---
Crazyman Flat***	e				
Crowder Flat (Calif.)	e				
Crystal (PP&L)	12/30	6	2.0	2.5	3.9
Diamond-Crater Summit	12/29	41	13.2	13.4	11.3[b]
Diamond Lake Junction (97)	12/29	4	1.0	2.0	2.4[b]
Dog Hollow	e				
Finley Corrals***	e				
Fort Klamath (PP&L)	e			2.1	1.7
Fourmile Lake	e				---
Gerber	12/29	T	0.0	2.7	1.1[b]
Harriman (PP&L)[a]	12/31	6	2.0	2.4	1.8
Howard Prairie	12/31	12	3.5	2.4	3.9[b]
Hyatt Prairie Reservoir	12/31	12	3.6	2.3	3.7
Kirk (PP&L)	e				3.3
Park Headquarters	12/31	84	25.5	29.6	23.3
Quartz Mountain	12/29	4	0.8	3.1	2.6
Seven Mile	e				
State Line (Calif.)	e				
Strawberry	e				
Strawberry***	e				
Summer Rim	e				
Summer Rim***	e				
Summer Rim Pillow*	e				
Sycan Flat	e				
Taylor Butte	12/30	3	0.[illegible]	1.[illegible]	2.3[b]
Taylor Butte Pillow	e				
LAKE COUNTY, GOOSE LAKE WATERSHEDS					
Adin Mountain (Calif.)	e				
Bald Mountain (Nev.)	e				
Bear Flat Meadow	e				
Camas Creek	12/29	8	2.4	2.8	4.1
Cedar Pass (Calif.)	e				
Colvin Creek	e				
Cox Flat	e				
Crowder Flat (Calif.)	e				
Dismal Swamp (Calif.)	e				
Finley Corrals***	e				
Hart Mountain	e				
Little Bally Mtn. (Nev.)	e				
Mt. Bidwell (Calif.)	e				
North Star (Calif.)	e				
Patton Meadows***	e				
Quartz Mountain	12/29	4	0.8	3.1	2.6
Rogger Meadows	e		---		---
Sherman Valley	e				
Silver Creek	12/26	2	0.4	0.7	1.5
State Line (Calif.)	e				
Strawberry	e				
Strawberry***	e				
Summer Rim	e				
Summer Rim***	e				
Summer Rim Pillow*	e				
Sycan Flat	e				

BASIC DATA SUPPLEMENT 1

JANUARY 1, 1976

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont (In.)	Water Content (inches) Last Yr.	Ave.[c]
HARNEY BASIN WATERSHEDS					
Blue Mountain Springs	1/2	25	6.0	4.6	6.1
Blue Mtn. Springs Pillow*	1/2	--	8.3	3.8	---
Buck Pasture	[e]				
Buckskin Lake	[e]				
Call Meadows	[e]				
Delintment Lake	[e]				
Denio Creek	[e]				
Disaster Peak (Nev.)	[e]				
Emigrant Butte	[e]				
Fish Creek	[e]				
Hart Mountain	[e]				
Idlewild Camp Alternate	12/29	4	1.9	1.4	---
Izee Summit	1/2	14	2.8	3.6	3.0
Lake Creek R.S.	1.2	17	3.4	4.2	3.8[b]
Oregon Canyon	[e]				
Rock Spring	1/2	9	1.8	2.6	1.8
Silvies	[e]				
Snow Mountain	[e]				
Snow Mountain Pillow**	12/29	--	1.9	[e]	
Starr Ridge	[e]			3.6	2.2
Stinking Water	12/31	5	1.5	1.9	1.4[b]
Trout Creek	[e]				
"V" Lake	[e]				
LOWER COLUMBIA WATERSHEDS					
Blazed Alder	12/31	--	8.9	---	---
Mt. Hood Test Site	12/31	--	24.3	[e]	22.9
Mud Ridge	12/29	29	11.5	---	---
North Fork Reservoir	[e]				
Still Creek	12/29	21	8.6	5.4	7.9

* Manometer reading
** Telemetry reading
*** Aerial
T Trace

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches) Last Yr.	Ave.[c]

BASIC DATA SUPPLEMENT 2

JANUARY 1, 1976

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average [c]
OWYHEE, MALHEUR WATERSHEDS							
Bear Creek (Nev.)	7800	72	16.8	*e*			
Big Bend (Nev.)	6700	48	16.7	*e*			
Blue Mountain Spring	5900	42	16.9	*e*			
Mud Flat (Ida.)	5500	48	12.8	*e*			
Rodeo Flat (Nev.)	6800	42	11.0	*e*			
Taylor Canyon (Nev.)	6200	48	15.1	*e*			
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Blue Mountain Summit	5100	36	16.8	12/27	9.2	---	8.7
Dooley Mountain	5430	36	9.2	12/30	3.2	2.4	4.0
Emigrant Springs	3925	48	22.3	*e*			
Ladd Summit	3730	48	18.9	12/29	10.5	9.2	10.0
Moss Springs	5850	36	25.8	*e*			
Tollgate	5070	48	23.6	*e*			
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	1/8/76	11.7	11.7	11.7
Emigrant Springs	3925	48	22.3	*e*			
Tollgate	5070	48	23.6	*e*			
UPPER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	1/8/76	11.7	11.7	11.7
Blue Mountain Spring	5900	42	16.9	*e*			
Blue Mountain Summit	5100	36	16.8	12/27	9.2	---	8.7
Derr	5670	24	9.0	*e*			
Marks Creek	4540	36	14.1	*e*			
Snow Mountain	6300	48	16.7	*e*			
Starr Ridge	5150	36	10.6	*e*			
UPPER DESCHUTES, CROOKED WATERSHEDS							
Derr	5670	24	9.0	*e*			
Marks Creek	4540	36	14.1	*e*			
Snow Mountain	6300	48	16.7	*e*			
KLAMATH WATERSHEDS							
Quartz Mountain	5230	48	15.3	12/29	8.4	5.9	8.6

BASIC DATA SUPPLEMENT 2

JANUARY 1, 1976

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average [c]
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	12/29	12.3	10.8	11.9
Quartz Mountain	5230	48	15.3	12/29	8.4	5.9	8.6
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	*e*			
Silvies	6900	48	16.4	*e*			
Snow Mountain	6300	48	16.7	*e*			
Starr Ridge	5150	36	10.6	*e*			
Willow-Bald	5000	24	6.6	*e*			

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

BASIC DATA SUPPLEMENT 3

JANUARY 1, 1976

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precip-itation	Last Year	Average
Camas Creek (Lake County)	5825	From 12/2 to 12/29	2.90	4.80	----
County Line (Umatilla County--Starkey Hdqs.)	4800	From ___ to 12/30	2.90	5.30	----
Fish Lake (Jackson County)	4865	From ___ to 12/29	4.20	----	----
Mud Ridge (Clackamas County)	3800	From 10/14 to 12/29	31.62	----	----
Quartz Mt. Summit (Lake County)	6300	From ___ to 12/29	3.00	3.55	----
Saddle Mountain (Washington County)	3250	From 12/1 to 12/31	21.90	20.00	----
Seine Creek (Washington County)	2150	From 12/1 to 12/31	14.50	12.90	----
Silver Creek (Lake County)	4900	From ___ to 12/26	15.95	3.07	----

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

Map and Index to OREGON SNOW COURSES

OWYHEE, MALHEUR WATERSHEDS (1)

Owyhee River

Number	Name		Sec	Twp	Rge	Elev
16G6	Antelope Ridge	(Ida)	20	8S	1E	5900
16G9a	Battle Creek	(Ida)	10	11S	1E	5700
15H1MA	Bear Creek	(Nev)	31	46N	58E	7800
15H4MP	Big Bend	(Nev)	30	45N	56E	6700
17H2	Buckskin, Lower	(Nev)	25	45N	39E	6700
17H1	Buckskin, Upper	(Nev)	11	45N	39E	7200
16G10a	Bull Basin	(Ida)	29	12S	5W	5600
16H6a	Columbia Basin	(Nev)	31	44N	53E	6650
18H1	Disaster Peak	(Nev)	8	47N	34E	6500
16H8a	Fawn Creek	(Nev)	2	45N	52E	7000
18G2PA	Fish Creek		4	33S	33E	7900
15H2	Fox Creek	(Nev	33	4oN	58E	6800
15H7	Fry Canyon	(Nev)	31	43N	54E	6700
15H5	Gold Creek	(Nev)	31	45N	56E	6600
17H4	Granite Peak	(Nev)	22	44N	39E	7800
16G5a	Hyde Pasture	(Ida)	31	8S	2W	5800
16H1M	Jack Creek, Lower	(Nev)	18	42N	53E	6800
16H2A	Jack Creek, Upper	(Nev)	9	42N	53E	7250
16H4	Jack Peak	(Nev)	28	42N	53E	8420
17G3m	Jordan Valley		2	30S	46E	4390
16H5	Laurel Draw	(Nev)	20	45N	53E	6700
17G6a	Lookout Butte		2	40S	47E	5650
17G4a	Louse Canyon		27	40S	44E	6440
17H3	Martin Creek	(Nev)	18	44N	40E	6700
15H20a	Merritt Mountain	(Nev)	10	46N	54E	7000
16H3AP	Midas	(Nev)	18	39N	46E	7200
16G7MP	Mud Flat	(Ida)	34	9S	2W	5500
17G5a	Oregon Canyon		8	40S	40E	6950
17H6a	Quinn Ridge	(Nev)	9	47N	41E	6300
16G11a	Red Canyon	(Ida)	32	11S	4W	6650
15H6MP	Rodeo Flat	(Nev)	36	43N	53E	6800
15H3A	76 Creek	(Nev)	6	44N	58E	7100
16F3AP*	Silver City	(Ida)	6	5S	3W	6400
18G1PA	Silvies		35	32S	33E	6900
16G1P	South Mountain No.2	(Ida)	10	8S	5W	6340
15H19a	Stag Mountain	(Nev)	32	41N	58E	7800
16F6a	Succor Creek	(Ida)	25	3S	5W	6100
15H9MP	Taylor Canyon	(Nev)	35	39N	53E	6200
16H7a	Toe Jam	(Nev)	29	40N	50E	7700
15H8	Tremewan Ranch	(Nev)	9	39N	55E	5700
16G4MA	Triangle	(Ida)	25	7S	3W	5150
18G5a	Trout Creek		10	41S	38E	7800
18G7a	"V" Lake		31	35½S	32½E	6600
16G12a	Vaught Ranch	(Ida)	10	11S	1W	5950
16G13a	War Eagle	(Ida)	20	5S	3W	7700

Malheur River

Number	Name	Sec	Twp	Rge	Elev
18E16MP	Blue Mountain Springs	21	15S	35E	5900
18F6a	Buck Pasture	28	29S	35E	5300
18E21a	Bully Creek	11	17S	37E	5300
18F7a	Call Meadows	29	20S	33E	5340
17F2a	Cottonwood-Indian	3	19S	39E	4320
18E19M	Crane Prairie	24	16S	34E	5375
18E20	Eldorado Pass	20	14S	38E	4600
18E26a	Flag Prairie	32	16S	36E	4750
18E18	Lake Creek	10	16S	33½E	5200
18E22a	Logan Valley	13	16S	33½E	5100
18F1	Rock Spring	23	18S	32E	5100
18E32p*	S. Fk. Willow Cr.	2	16S	37E	5500
18F4P	Stinking Water	34	21S	34E	4800

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (2)

Burnt River

Number	Name	Sec	Twp	Rge	Elev
18E13M	Blue Mountain Summit	6	12S	36E	5098
17E1MP	Dooley Mountain	32	11S	40E	5430
18E20	Eldorado Pass	20	14S	38E	4600
18E8	Gold Center	21	9S	36E	5340
18E9P	Tipton	34	10S	35E	5100

Powder River

Number	Name	Sec	Twp	Rge	Elev
18E1P	Anthony Lake	18	7S	37E	7125
18E5	Bourne	33	8S	37E	5800
17E1MP	Dooley Mountain	32	11S	40E	5430
18E3	Ellertson Meadows	18	8S	38E	5400
18E8	Gold Center	21	9S	36E	5340
18E6A	Goodrich Lake	4	9S	38E	6775
18E29	Intake House	5	8S	38E	4930
17D12m	Ladd Summit	5	5S	39E	3730
18E23	Little Alps	10	7S	37E	6200
18E30	Little Antone	1	7S	37E	5000
18E28	Power Plant	33	7S	38E	3990
17D7P	Taylor Green	3	6S	42E	5740

Pine Creek

Number	Name	Sec	Twp	Rge	Elev
17D8	Schneider Meadows	35	6S	45E	5400

Grande Ronde River

Number	Name	Sec	Twp	Rge	Elev
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
18E1P	Anthony Lake	18	7S	37E	7125
17D10a	Bald Mountain	14 & 15	4S	41E	6700
18D9	Beaver Reservoir	8	5S	37E	5150
18D8P	County Line	28	4S	34E	4800
18D6P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24	1S	35E	4300
17D13a	Mirror Lake	34	4S	44E	8200
17D6M	Moss Spring	28	3S	41E	5850
18D7	Schoolmarm	28	4S	34E	4775
17D11a	Standley	21	2S	42E	7400
17D7P	Taylor Green	3	6S	42E	5740
18D3	Tollgate	32	4N	38E	5070
17D16a	TV Ridge No. 2	12	2S	43E	7000

Imnaha River

Number	Name	Sec	Twp	Rge	Elev
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
17D14a	Big Sheep	33	4S	46E	6200

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (3)

Umatilla River

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18D12MP	Battle Mountain Summit	29	3S	31E	4340
18D20	Bowman Springs	29	2S	35E	4580
20E4	Butte Creek Summit	5	8S	22E	3930
18D4M	Emigrant Springs	29	1N	35E	3925
18D19	High Ridge	31	3N	38E	4150
18D6P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24	1S	35E	4300
18D3	Tollgate	32	4N	38E	5070

Walla Walla River

Number	Name	Sec	Twp	Rge	Elev
18D16	Blue Mountain Camp	35	4N	37E	4300
18D3	Tollgate	32	4N	38E	5070

Willow Creek

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18E1P	Anthony Lake	18	7S	37E	7125

LEGEND

19D2	SNOW COURSE ONLY
19D2M	SNOW COURSE AND SOIL MOISTURE
19D2MA	SNOW COURSE, SOIL MOISTURE AND AERIAL MARKER
19D2A	SNOW COURSE AND AERIAL MARKER
19D2m	SOIL MOISTURE ONLY
19D2a	AERIAL MARKER ONLY
19D2P	SNOW COURSE AND PRECIPITATION GAGE
19D2p	PRECIPITATION GAGE ONLY
19D2'	RADIO TELEMETRY

UPPER JOHN DAY WATERSHEDS (4)

Upper John Day River

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18D12MP	Battle Mountain Summit	29	3S	31E	4340
18E16MP	Blue Mountain Springs	21	15S	35E	5900
18E13M	Blue Mountain Summit	6	12S	36E	5098
20E4	Butte Creek Summit	5	8S	22E	3930
19E3MP	Derr	14	13S	23E	5670
18E8	Gold Center	21	9S	36E	5340
18E24a	Indian Cr. Butte	5	15S	33E	6550
19E9P	Izee Summit	28	16S	29E	5293
18D6P	Lucky Strike	28	3S	32E	5050
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
18E7a	Olive Lake	14	9S	34E	6000
18D7	Schoolmarm	28	4S	34E	4775
19F1*	Snow Mountain	1	19S	26E	6220
19E7M	Starr Ridge	20	15S	31E	5150
18E9P	Tipton	34	10S	35½E	5100

UPPER DESCHUTES, CROOKED WATERSHEDS (5)

Upper Deschutes River

Number	Name	Sec	Twp	Rge	Elev
21E22	Bald Peter	29	10S	9E	5400
21F8	Caldwell Ranch	30	21S	8E	4400
22F3	Cascade Summit	7	23S	6E	4880
21F11	Chemult	21	27S	8E	4760
21E6	Hogg Pass	24	13S	7½E	4755
21F4	Hungry Flat	29	18S	11E	4400
21F6*	Irish-Taylor	25	20S	6E	5500
21E25a	Lionshead	1	10S	8E	5400
21F10	New Crescent Lake	11	24S	6E	4800
21E16	New Outchman Flat #2	21	18S	9E	6400
21E23	Racing Creek	15	10S	9E	4800
22F14*	Summit Lake	33	24S	5½E	5600
21F3	Tangent	28	18S	10E	5400
21E15	Three Creeks Butte	27	16S	9E	5200
21E13*	Three Creeks Meadows	34	16S	9E	5650
22F2P	Waldo Lake	15	21S	6E	5600
21E24a	Whitewater Meadow	17	10S	9E	4160

Crooked River

Number	Name	Sec	Twp	Rge	Elev
19E3MP	Derr	14	13S	23E	5670
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
19F1*	Snow Mountain	1	19S	26E	6220
19E4	Tamarack	8	15S	25E	4800

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS (6)

Hood River

Number	Name	Sec	Twp	Rge	Elev
21D6P	Brooks Meadows	2	2S	10E	4300
21D25	Cooper Spur	6	2S	10E	3490
21D1	Greenpoint Reservoir	27	2N	9E	3200
21D20	Knebal Springs	31	1S	11E	3850
21D8*	Phlox Point	7	3S	9E	5400
21D4	Red Hill	20	1S	9E	4400
21D9	Still Creek	25	3S	8½E	3670
21D28	Switchback	28	1S	9E	3255
21D7P	Tilly Jane	15	2S	9E	6000
21D21	Ulrich Ranch Junction	28	1S	11E	3350
21D30	Umbrella Falls	3	3S	9E	5400

Mile Creeks - Mosier Creek

Number	Name	Sec	Twp	Rge	Elev
21D6P	Brooks Meadows	2	2S	10E	4300
21D20	Knebal Springs	31	1S	11E	3850
21D21	Ulrich Ranch Junction	28	1S	11E	3350

Lower Deschutes River

Number	Name	Sec	Twp	Rge	Elev
21D12	Clear Lake	29	4S	9E	3500
21D22	Clear Lake Experimental	29	4S	9E	3500
21E6	Hogg Pass	24	13S	7½E	4755

LOWER COLUMBIA WATERSHEDS (7)

Bull Run River

Number	Name	Sec	Twp	Rge	Elev
21D33*	Blazed Alder	5	2S	8E	3650

Sandy River

Number	Name	Sec	Twp	Rge	Elev
21D35	Mud Ridge	1	4S	8½E	3800
21D34	North Fork Reservoir	24	1N	6E	3120
21D8*	Phlox Point	7	3S	9E	5400
21D9	Still Creek	25	3S	8½E	3670

WILLAMETTE WATERSHEDS (8)

Clackamas River

Number	Name	Sec	Twp	Rge	Elev
21D13	Clackamas Lake	35	5S	8½E	3400
21D12	Clear Lake	29	4S	9E	3500
21D16	Lake Harriet	4	6S	7E	2045
21D14P*	Peavine Ridge	14 & 15	6S	7E	3500
21D8*	Phlox Point	7	3S	9E	5400
21D9	Still Creek	25	3S	8½E	3670
21D17	Timothy Lake	26	5S	8E	3295

Santiam River

Number	Name	Sec	Twp	Rge	Elev
22E1	Detroit (City)	1	10S	5E	1610
22E2	Detroit Dam	7	10S	5E	1580
21E6	Hogg Pass	24	13S	7½E	4755
21E4	Marion Forks	29	11S	7E	2600
22E3	Mill City	29	9S	3E	826
21E5	Santiam Junction	14	13S	7E	3750
21E3	Whitewater Bridge	20	10S	7E	2175

McKenzie River

Number	Name	Sec	Twp	Rge	Elev
21E8	Dead Horse Grade	13	16S	7E	3700
22E4	Lost Creek Ranch	19	16S	7E	1956
21E7	McKenzie	34	15S	7½E	4800
22E5	McKenzie Bridge	13	16S	5E	1372
22E6	Vida	28	16S	2E	800
21E9	White Branch Slide	15	16S	7E	2700

Middle Fork Willamette River

Number	Name	Sec	Twp	Rge	Elev
22F3	Cascade Summit	7	23S	6E	4880
22F8	Lookout Point Dam	13	19S	1W	750
22F6	McCredie Springs	36	21S	4E	2120
22F7	Oakridge	16	21S	3E	1310
22F5	Railroad Overpass	21	22S	5E	2750
22F4	Salt Creek Falls	32	22S	5½E	4000
22F14*	Summit Lake	33	24S	5½E	5600
22F2P	Waldo Lake	15	24S	6E	5600

Coast Fork Willamette River

Number	Name	Sec	Twp	Rge	Elev
22F9	Champion	12	23S	1E	4500
22F10	Golden Curry Creek	1	23S	1E	3136
22F13	Layng Creek R.S.	31	21S	1E	1200
22F12	Lund Park	22	22S	1E	1740
22F11	Weaver Creek	35	22S	1E	2440

Mary's River

Number	Name	Sec	Twp	Rge	Elev
23E1	Mary's Peak	21	12S	7W	3620

Luckiamute River

Number	Name	Sec	Twp	Rge	Elev
23E2	Laurel Mountain	6	8S	7W	3000
23E3	Valsetz Summit	3	9S	7W	2600

Tualatin River

Number	Name	Sec	Twp	Rge	Elev
23D2*	Seine Creek	34	1N	5W	2000
23D1*	Saddle Mountain	25	1N	6W	3250

ROGUE, UMPQUA WATERSHEDS (9)

Rogue River

Number	Name	Sec	Twp	Rge	Elev
23G4P	Althouse	17	41S	7W	4530
22G6	Annie Spring	19	31S	6E	6018
22G28	Beaver Dam Creek	1	38S	4E	5100
22G21P	Big Red Mountain	31	40S	1W	6250
22G13P	Billie Creek Divide	30	36S	5E	5300
22G30	Caliban	16	40S	1E	6500
22G27	Deadwood Junction	8	38S	4E	4600
22F19	Diamond-Crater Summit	3	29S	6E	5800
22G14P	Fish Lake	3	37S	4E	4665
22G12	Fourmile Lake	9	36S	5E	6000
23G3	Grayback Peak	9	40S	5W	6000
22G26	Howard Prairie	32	38S	4E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
22G22	Little Red Mountain	25	40S	2W	6500
22G31	Mt. Ashland Switchback	15	40S	1E	6400
23G14	Mule Creek	8	32S	9W	3680
23G5	Page Mountain	5	41S	7W	4045
22G5	Park Headquarters	8	31S	6E	6550
22G11	Seven Lakes No. 2	26	33S	5E	6200
22G2	Silver Burn	30	30S	4E	3720
22G20	Siskiyou Summit	17	40S	2E	4630
22G32	Ski Bowl Road	22	40S	1E	6000
22G9	South Fork Canal	12	33S	3E	3500
22G1	Whaleback	4	31S	2E	5025

Umpqua River

Number	Name	Sec	Twp	Rge	Elev
22F9	Champion	12	23S	1E	4500
22F18P	Diamond Lake	29	27S	6E	5315
23G8	King Mountain No. 1	5	33S	4W	4500
23G9	King Mountain No. 2	4	33S	4W	4000
23G10	King Mountain No. 3	33	32S	4W	3648
23G11	King Mountain No. 4	33	32S	4W	3049
23G12	King Mountain No. 5	29 & 28	32S	4W	2380
23G13	King Mountain No. 6	20	32S	4W	1820
22F16	North Umpqua	19	26S	6E	4215
22F23	Red Butte No. 1	36	27S	2W	4560
22F24	Red Butte No. 2	30	27S	1W	4000
22F25	Red Butte No. 3	30	27S	1W	3500
22F26	Red Butte No. 4	30	27S	1W	3000
22F27	Red Butte No. 5	20	27S	1W	2500
22F28	Red Butte No. 6	17	27S	1W	2000
22F17	Trap Creek	1	27S	4E	3800
22G1	Whaleback	4	31S	2E	5025

KLAMATH WATERSHEDS (10)

Klamath River

Number	Name		Sec	Twp	Rge	Elev
22G6	Annie Spring		19	31S	6E	6018
22G13P	Billie Creek Divide		30	36S	5E	5300
21F11	Chemult		21	27S	8E	4760
22G24*	Cold Springs Camp		12	35S	5E	6100
20G12a	Crazyman Flat		9	34S	15E	6100
20H2a	Crowder Flat	(Cal)	30	47N	11E	5200
22F19	Diamond-Crater Summit		3	29S	6E	5800
21F18	Diamond Lake Jct.	(97)	1	29S	7E	4600
21G6a	Dog Hollow		1	40S	14E	4900
20G14a	Finley Corrals		11	36S	16E	6000
22G12	Fourmile Lake		9	36S	5E	6000
21G4P	Gerber		12	39S	13E	4850
22G26	Howard Prairie		32	38S	4E	4500
22G16	Hyatt Prairie Reservoir		15	39S	3E	4900
22G15	Lake of the Woods		11	37S	5E	4960
22G5	Park Headquarters		8	31S	6E	6550
20G6MP	Quartz Mountain		2	38S	16E	5320
22G11	Seven Lakes No. 2		26	33S	5E	6200
22G33	Seven Mile		20	33S	6E	5725
20H1a	State Line	(Cal)	21	48N	11E	5750
20G9AP	Strawberry		4	40S	16E	5760
20G2AP	Summer Rim		23	33S	16E	7100
20G13a	Sycan Flat		25	31S	14E	5500
21G3P	Taylor Butte		21	33S	11E	5100

Pacific Power and Light Company's Snow Stations

Number	Name	Sec	Twp	Rge	Elev
3	Chiloquin (PP&L)	34	34S	7E	4187
4	Crystal (PP&L)	26	34S	6E	4200
5	Fort Klamath (PP&L)	22	33S	7½E	4150
8	Harriman Lodge (PP&L)	3	36S	6E	4200
6	Kirk (PP&L)	1	33S	7E	4533

LAKE COUNTY, GOOSE LAKE WATERSHEDS (11)

Goose Lake

Number	Name		Sec	Twp	Rge	Elev
20G15a	Bear Flat Meadow		27	36S	19E	5900
20G8MP	Camas Creek		5	39S	21E	5720
20G11A	Cox Flat		16	37S	18E	5750
20H2a	Crowder Flat	(Cal)	30	47N	11E	5200
20H3a	Dismal Swamp	(Cal)	31	48N	16E	7200
20G17a	Patton Meadow		28	38S	18E	6800
20G6MP	Quartz Mountain		2	38S	16E	5320
20H1a	State Line	(Cal)	21	48N	11E	5750
20G9AP	Strawberry		4	40S	16E	5760
20G16a	Willow Creek		13	40S	21E	6020

Abert Lake

Number	Name	Sec	Twp	Rge	Elev
20G15a	Bear Flat Meadow	27	36S	19E	5900
20G18ap	Colvin Creek	12	36S	21E	6550
20G11A	Cox Flat	16	37S	18E	5750
20G14a	Finley Corrals	11	36S	16E	6000
20G6MP	Quartz Mountain	2	38S	16E	5320
20G10a	Sherman Valley	15	37S	21E	6600

Summer Lake

Number	Name	Sec	Twp	Rge	Elev
20G2AP	Summer Rim	23	33S	16E	7100

Silver Lake

Number	Name	Sec	Twp	Rge	Elev
21F2P	Silver Creek	25 & 26	29S	13E	4900
20G13a	Sycan Flat	25	31S	14E	5500

Warner Lake

Number	Name		Sec	Twp	Rge	Elev
20G8MP	Camas Creek		5	39S	21E	5720
20H3a	Dismal Swamp	(Cal)	31	48N	16E	7200
19G1a	Hart Mountain		1	36S	25E	6350
20G10a	Sherman Valley		15	37S	21E	6600
20G16a	Willow Creek		13	40S	21E	6020

Guano Lake

Number	Name		Sec	Twp	Rge	Elev
19H1	Bald Mountain	(Nev)	17	45N	21E	6720
19G1a	Hart Mountain		1	36S	25E	6350
19H4a	Little Bally Mt.	(Nev)	8	45N	19E	6600

HARNEY BASIN WATERSHED (12)

Silvies River - Silver Creek

Number	Name	Sec	Twp	Rge	Elev
18F7a	Call Meadows	29	20S	33E	5340
19F2	Ointment Lake	28	19S	26E	5600
19F3	Emigrant Butte	14	21S	27E	5000
18F3P	Idlewild Camp	27	20S	31E	5200
19E9P	Izee Summit	28	16S	29E	5293
18F1	Rock Spring	23	18S	32E	5100
19F1*	Snow Mountain	1	19S	26E	6220
19E7M	Starr Ridge	20	15S	31E	5150
18F4P	Stinking Water	34	21S	34E	4800

Donner Und Blitzen River

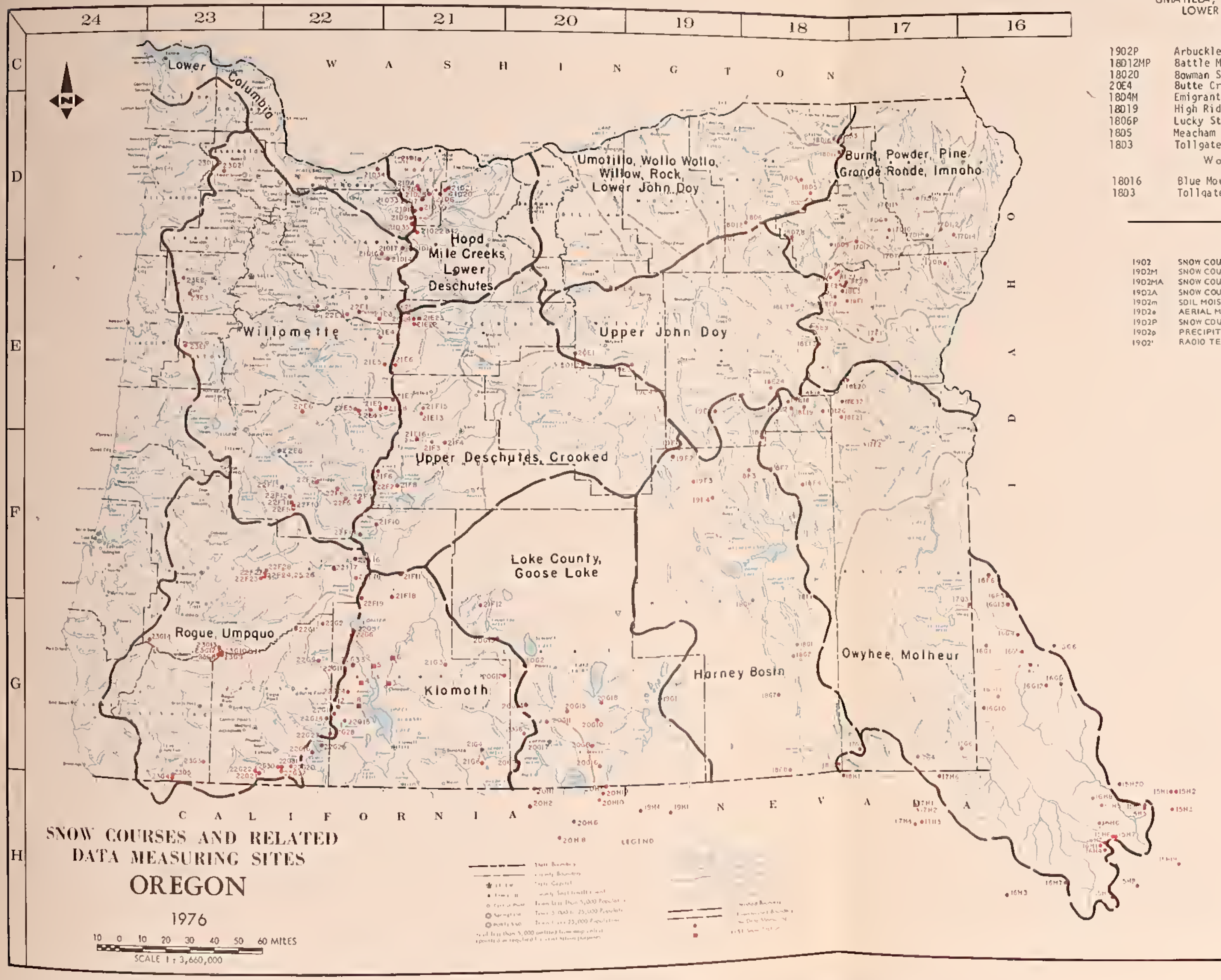
Number	Name	Sec	Twp	Rge	Elev
18F6a	Buck Pasture	28	29S	35E	5300
18G2PA	Fish Creek	4	33S	33E	7900
19G1a	Hart Mountain	1	36S	25E	6350
18G1PA	Silvies	35	32S	33E	6900
18G7a	"V" Lake	31	35 S	32½E	6600

Trout and Whitehorse Creeks

Number	Name		Sec	Twp	Rge	Elev
18G6a	Dento Creek		14	41S	34E	6000
18H1	Disaster Peak	(Nev)	8	47N	34E	6500
17G5a	Oregon Canyon		8	40S	40E	6950
18G5a	Trout Creek		10	41S	38E	7800

Harney Lake

Number	Name	Sec	Twp	Rge	Elev
18G8a	Buckskin Lake	25	29S	30E	5200



The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE
- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon Department Of Water Resources
- Soil and Water Conservation Districts of Oregon

COUNTY
- Douglas County Water Resources Survey

FEDERAL
- Department of Agriculture
  - Cooperative Extension Service
  - Forest Service
  - Soil Conservation Service
- Department of Commerce
  - NOAA, National Weather Service
- Department of the Interior
  - Bonneville Power Administration
  - Bureau of Land Management
  - Bureau of Reclamation
  - Fish and Wildlife Service
  - Geological Survey
- Department of National Defense
  - Corps of Army Engineers

PUBLIC UTILITIES
- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES
- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS
- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale - Oregon Irrigation District
- Warmsprings Irrigation District

PRIVATE ORGANIZATIONS
- The Crag Rats, Hood River, Oregon

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
1220 S.W. THIRD AVE.
PORTLAND, OREGON 97204

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

Return this entire sheet to above address, if you do NOT wish to receive this material ☐, or if change of address is needed ☐ (indicate changes in address below, including ZIP code).

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE
AGR-101

U.S. MAIL

FIRST CLASS MAIL

FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"

USDA NATIONAL AGRICULTURAL LIB
CURRENT SERIAL RECORD
BELTSVILLE, MARYLAND 20705